IN THE CLAIMS

1-16 (cancelled)

17. (currently amended) A method comprising applying a manganese phosphate layer to an iron or steel surface of a workpiece by contacting the iron or steel surface with a phosphating solution, wherein the phophating solution comprises: ~~comprising~~

0.2 to 4 g/l of iron (II) ions;
10 to 25 g/l of manganese ions;
25 to 50 g/l of phosphate ions calculated as P_2O_5;
3 to 35 g/l of nitrate ions; and
0.5 to 5 g/l of nitroguanidine;

said solution having 7 to 24 points of free acid, 50 to 140 points of total acid, and an S value of 0.2 to 1, and

drying the workpieces to form a manganese phosphate layer having a minimum thickness of 2 microns and an average maximum roughness depth (R_z) of from 1.3 to 2.5 microns.

18. (previously presented) The method according to claim 17, wherein said phosphating solution that comprises 0.5 to 2 g/l of nitroguanidine.

19. (previously presented) A method according to claim 17, wherein the phosphating solution comprises not more than 2.5 g/1 of iron (II) ions.

20. (currently amended) A method according to claim 17, wherein the workpiece is steel and said phosphating solution comprises a complex-forming agent for ~~the~~ alloying constituents of the steel.

21. (currently amended) A method according to claim 20, wherein said complex-forming ~~coupler-forming~~ agent is citric acid.

22. (previously presented) A method according to claim 17, wherein said phosphating solution further comprises

0.2 to 4 g/l of nickel ions or

0.2 to 4 g/l of magnesium ions.

23. (previously presented) A method according to claim 17, wherein at least a portion of the manganese ions in said phosphating solution are replaced by manganese carbonate to neutralize free acid.

24. (previously presented) A method according to claim 17, wherein said workpieces are subjected to a sliding friction.

25. (previously presented) A method according to claim 17, wherein said workpieces are selected from the group consisting of axles, gear mechanism parts and engine pistons.

26. (new) A method comprising applying a manganese phosphate layer to an iron or steel surface of a workpiece by contacting the iron or steel surface with a phosphating solution, wherein the phophating solution consists essentially of:

0.2 to 4 g/l of iron (II) ions;
10 to 25 g/l of manganese ions;
25 to 50 g/l of phosphate ions calculated as P_2O_5;
3 to 35 g/1 of nitrate ions; and
0.5 to 5 g/l of nitroguanidine;

said solution having 7 to 24 points of free acid, 50 to 140 points of total acid, and an S value of 0.2 to 1, and

drying the workpieces to form a manganese phosphate layer having a minimum thickness of 2 microns and an average maximum roughness depth (R_z) of from 1.3 to 2.5 microns.

27. (new) A method comprising applying a manganese phosphate layer to an iron or steel surface of a workpiece by contacting the iron or steel surface with a phosphating solution, wherein the phophating solution consists of:

0.2 to 4 g/l of iron (II) ions;
10 to 25 g/l of manganese ions;
25 to 50 g/l of phosphate ions calculated as P_2O_5;
3 to 35 g/l of nitrate ions; and
0.5 to 5 g/l of nitroguanidine;

said solution having 7 to 24 points of free acid, 50 to 140 points of total acid, and an S value of 0.2 to 1, and

drying the workpieces to form a manganese phosphate layer having a minimum thickness of 2 microns and an average maximum roughness depth (R_z) of from 1.3 to 2.5 microns.